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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,838	06/24/2003	Birthe Lykkegaard Hansen	6423.404-US	9325

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NOVO NORDISK, INC.  
INTELLECTUAL PROPERTY DEPARTMENT  
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EXAMINER
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HA, JULIE

ART UNIT	PAPER NUMBER
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1654

NOTIFICATION DATE	DELIVERY MODE
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09/03/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

nnipatent@novonordisk.com  
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<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	<b>Application No.</b> 10/602,838	<b>Applicant(s)</b> HANSEN ET AL.	
	<b>Examiner</b> JULIE HA	<b>Art Unit</b> 1654	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 05 August 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 6 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☒ The Notice of Appeal was filed on 05 August 2008. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: \_\_\_\_\_.
- Claim(s) objected to: \_\_\_\_\_.
- Claim(s) rejected: 1-4,6,7,11,14-19,21-26 and 29-31.
- Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
Please see continuation of 11 below.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_
13. ☐ Other: \_\_\_\_\_.

/J. H./  
Examiner, Art Unit 1654

/Anish Gupta/  
Primary Examiner, Art Unit 1654

Continuation of 11: Rejection of claims 10 and 12-13 are hereby withdrawn in view of Applicant's cancellation of claims 10 and 12-13.

Claims 1-4, 6-7, 11, 14-19, 21-26 and 29-31 remain rejected under 35 U.S.C. 103(a) as being unpatentable over The Medicine Catalogue (Laegemiddel Kataloget) in view of Pingel et al (US Patent No. 6,903,069) and Johannessen et al (WO 01/82943) and Perez Garcia (US Patent No. 2,145,869) as set forth in the previous office action.

Applicant argues that "the present invention is directed to a "composition that comprises a calcium salt in a concentration of at least 200 mM, such that the composition is hypertonic." In contrast, neither The Medicine Catalogue or Johannessen teach or suggest a composition comprising anywhere near the amount of 29.4 mg/ml of CaCl<sub>2</sub>...the present invention is based on the discovery that such "hypertonic" compositions dramatically results in a decreased formation of heavy chain fragments during storage for as long as six months....the present invention is not based upon the optimization of known ranges within the art by routine experimentation, but instead the discovery of a critical aspect of maintaining the stability of such Factor VII formulations."

Applicant's arguments have been fully considered but have not been found persuasive because both The Medicine Catalogue and Johannessen teach that calcium or other divalent metal ions are necessary for the maintenance of the FVIIa activity. Since the calcium or other divalent metal ions are necessary for the maintenance of the FVIIa activity, and is required in an amount more than 0.15 mg/ml, and The Medicine Catalogue utilized 1.5 mg of CaCl<sub>2</sub>, it would have been obvious to one of ordinary skill in the art to optimize the amount or the concentration of the calcium chloride to optimize the activity of the FVIIa. All references teach utilizing different concentrations of CaCl<sub>2</sub> in the formulation. Furthermore, Johannessen does not give an upper limit for the CaCl<sub>2</sub> concentration, therefore, one of ordinary skill in the art would have been motivated to try the highest concentration of CaCl<sub>2</sub> (saturation point) and work down from that point to optimize the concentration. One of ordinary skill in the art would be motivated to optimize the concentration of the divalent metal, since the normal desire of an artisan is to optimize or improve upon what is generally known through routine optimization. There is a reasonable expectation of success, since both the Medicine Catalogue and Johannessen teach that CaCl<sub>2</sub> maintained the activity of FVIIa, thus optimizing the CaCl<sub>2</sub> concentration would at least optimize the FVIIa activity.

#### Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JULIE HA whose telephone number is (571)272-5982. The examiner can normally be reached on Mon-Thurs, 5:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang can be reached on 571-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.